

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Michael G. Cleveland on Monday, March 24, 2008 at approximately 5:10 pm.

The application has been amended as follows:

Please amend **CLAIM 24** as follows –

24. In an image sensor that correlates a reset sample of a first signal during a first interval after reset of ~~a pixel in a photo detector~~ a photo detector for a pixel and a second sample of the first signal during a later interval in the same sampling cycle as the first interval to produce a luminance signal for said pixel, a method comprising:

detecting that the first signal is slewing excessively rapidly during the first interval; and

in response to said detecting, limiting the value of the reset sample;

whereby the image sensor produces an output of improved accuracy by abating an error in the luminance signal for said pixel due to said excessively rapid slewing, wherein the error is an image inversion due to over-saturation.

CLAIM 25 – canceled

Please change **CLAIM 28** to –

28. A method of image sensing, comprising:

determining a reset sample of a first signal during a first interval after reset of a pixel in a photo detector;

determining a second sample of the first signal during a later interval in the same sampling cycle as the first interval;

correlating the reset sample and the second sample to produce a luminance signal for said pixel;

detecting that the first signal is slewing excessively rapidly during the first interval; and in response to said detecting, limiting the value of the reset sample, whereby image inversion is at least partially abated.

Allowable Subject Matter

2. **Claim 1-4, 24 and 26-28** are allowed.

3. The following is an examiner's statement of reasons for allowance:

Claim 1 is allowed because the prior art does not teach or fairly suggest a method for image sensing comprising the acts of:

clamping, by a clamp circuit, at least one signal selected from the sampled signals during a reset phase of the correlated double sampler in response to a detecting of at least one over-saturation condition, whereby image inversion is at least partially abated, in combination with the other claimed elements.

Claims 2-4 and 27 are allowed because they each depend on claim 1.

Claim 24 is allowed because the prior art does not teach or fairly suggest in an image sensor that correlates a reset sample of a first signal during a first interval after reset of a pixel in a photo detector and a second sample of the first signal during a later interval in the same sampling cycle as the first interval to produce a luminance signal for said pixel, a method comprising:

whereby the image sensor produces an output of improved accuracy by abating an error in the luminance signal for said pixel due to said excessively rapid slewing, wherein the error is an image inversion due to over-saturation, in combination with the other claimed elements.

Claim 26 is allowed because it depends on claim 24.

Claim 28 is allowed because the prior art does not teach or fairly suggest a method of image sensing, comprising:

detecting that the first signal is slewing excessively rapidly during the first interval; and in response to said detecting, limiting the value of the reset sample, whereby image inversion is at least partially abated, in combination with the other claimed elements .

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CARRAMAH J. QUIETT whose telephone number is (571)272-7316. The examiner can normally be reached on 8:00-5:00 M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, NgocYen Vu can be reached on (571) 272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Carramah J Quiett/
Examiner, Art Unit 2622
March 25, 2008

*/Ngoc-Yen T. VU/
Supervisory Patent Examiner, Art Unit 2622*